

ABSTRACT

Sustained release microparticles suitable for various types of drugs, or drug-containing sustained release microparticles capable of sustained release of drugs over a period of three days or more and capable of, with respect to highly water-soluble drugs as well, inhibiting initial burst release; a process for producing the same; and preparations containing the microparticles. In particular, the drug-containing sustained release microparticles comprise a drug other than human growth hormone and a porous apatite derivative, or comprise a drug other than human growth hormone, a porous apatite derivative and a water-soluble bivalent metal compound. The drug-containing sustained release microparticles can be produced by dispersing under agitation microparticles of a porous apatite derivative in an aqueous solution containing a drug so that the aqueous solution infiltrates into the porous apatite derivative; adding thereto an aqueous solution containing a water-soluble bivalent metal compound so that the water-soluble bivalent metal compound infiltrates into the porous apatite derivative; further adding additives such as a stabilizer to the mixture; and effecting lyophilization or vacuum drying.